

Special Report

Recalibration of U.S. Public Finance Ratings

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Related Research

- *Fitch Ratings U.S. Public Finance Transition and Default Study 1999-2009, March 25, 2010*
- *Fitch Comments on Status of Municipal Ratings Framework Review, March 3, 2009*
- *Fitch Defers Final Determination on Municipal Ratings Recalibration, Oct. 7, 2008*
- *Exposure Draft: Reassessment of the Municipal Ratings Framework, July 31, 2008*

Summary

Fitch Ratings is proceeding with the recalibration of certain of its U.S. public finance credit ratings, initially announced in July 2008 (see *Fitch Research on "Exposure Draft: Reassessment of the Municipal Ratings Framework," dated July 31, 2008, available on Fitch's Web site at www.fitchratings.com*). The intent of the recalibration is to ensure a greater degree of comparability across Fitch's global portfolio of credit ratings. This recalibration will affect ratings in the state and local government tax-supported, water/sewer, public power distribution-only, and public higher education sectors. Other U.S. public finance sectors will not be affected.

- State and local general obligation ratings and those dependent on them (e.g. appropriation-backed debt) will be adjusted upward two notches if the GO rating is currently rated 'A' to 'BBB-' and one notch upward if the GO is currently rated 'A+' or higher.
- Special tax-backed bonds currently rated from 'BBB-' to 'AA+' will be adjusted up one notch.
- Water/sewer and public power distribution-only credits will be adjusted upward in the same manner as GO ratings.
- Public higher education ratings will be adjusted up one notch where the rating is currently 'AA-' to 'BBB-'; no adjustment will be made on public higher education ratings of 'AA' and higher.
- Ratings in the affected sectors that are currently below investment grade will be considered for recalibration on a case-by-case basis.

Recalibration Map

Current Rating	GO, Water/Sewer, Public Power (Distribution Only)	Rating Post-Recalibration		
		Appropriation-Backed Debt ^a	Special Tax	Public Higher Education
AAA	AAA	N.A.	AAA	AAA
AA+	AAA	AA+	AAA	AA+
AA	AA+	AA+	AA+	AA
AA-	AA	AA	AA	AA
A+	AA-	AA-	AA-	AA-
A	AA-	A+	A+	A+
A-	A+	A+	A	A
BBB+	A	A	A-	A-
BBB	A-	A-	BBB+	BBB+
BBB-	BBB+	BBB+	BBB	BBB
Below Investment Grade	Case by Case	Case by Case	Case by Case	Case by Case

^aAssumes current appropriation-backed debt rating is one notch below the corresponding GO.

All state ratings will be recalibrated on April 5. The remaining tax-supported ratings and the water/sewer, public power distribution-only, and public higher education ratings will be recalibrated on April 30.

The recalibration of certain public finance ratings should not be interpreted as an improvement in the credit quality of those securities. Rather, they are adjustments to denote a comparable level of credit risk as ratings in other sectors. To be sure, as noted herein, public finance issuers continue to face a range of significant economic, fiscal, and credit challenges. Fitch will continue to monitor all of its public finance ratings and make changes to ratings as Fitch's forward-looking views of credit risk evolve.

Background

Credit ratings provide Fitch's opinion on the relative ability of an entity to meet financial commitments. Fitch uses the same rating scale for all of its international scale ratings, thereby enabling market participants to compare Fitch's perspectives on credit risk across sectors and regions. However, Fitch notes that, in practice, individual ratings in different sectors and regions may demonstrate varying levels of transition, default, and recovery, depending on the historical period considered or the impact of systemic or idiosyncratic factors on a given rated entity. Nonetheless, the aspiration is for Fitch's ratings to demonstrate broadly comparable levels of default patterns over long periods.

By definition, a credit rating is a forward-looking opinion of relative credit risk. A common approach for measuring the performance of ratings over time is through transition and default studies, which measure migration and default patterns over various historical periods. Fitch has cautioned against the simple extrapolation of past performance of ratings into the future. In other words, a sector or issuer that has demonstrated a no- or low-default history or even limited negative ratings migration is not immune from the possibility of prospective worsening in credit risk just based on that past performance, nor is it guaranteed a given rating level going forward based solely on past performance. However, such studies can be instructive in considering the distribution of ratings and comparability of ratings across Fitch's rated portfolio.

Recalibrations may occasionally occur in the rating process in furthering the goal of enhanced comparability. For example, Fitch first reviewed its municipal ratings in 2000 following a default study it performed the prior year (*see Fitch Research on "Municipal Default Risk," dated Sept. 15, 1999, available on Fitch's Web site at www.fitchratings.com*), which indicated very low default rates for certain types of municipal obligations. This review resulted in an upward adjustment of about 25% of Fitch's GO ratings and one-half of its water/sewer revenue bond ratings.

In 2008, Fitch undertook a new review of its municipal ratings framework, the findings of which were published in the July 2008 exposure draft. In this report, Fitch announced that, in light of U.S. public finance's continued very low default history and to achieve comparability with its ratings in other sectors, it was considering revising upward by one-to-two notches its tax-supported and water/sewer ratings. That process was suspended in the fall of 2008 in the midst of the financial crisis.

Subsequent Events

Since the exposure draft was published, some of the challenges facing U.S. public finance issuers, such as reduced tax revenues, depressed housing prices, and retiree benefit funding demands have become more pronounced, while new problems, such as declines in commercial real estate and chronically high unemployment rates, have emerged to further pressure state and local government finances. In fact, Fitch's public finance ratings saw more downgrades in 2009 than any previous year (*see Fitch Research on "Fitch Ratings U.S. Public Finance Transition and Default Study 1999–2009," dated March 25, 2010, available on Fitch's Web site at www.fitchratings.com*).

www.fitchratings.com). The lag effects of property value declines, high unemployment rates, and the phasing out of federal stimulus funding will likely continue to exert credit pressure on a large number of municipal entities.

However, Fitch believes that public finance issuers such as state and local governments and certain essential service municipal enterprises have inherent strengths that allow them to maintain fiscal balance, including authority to raise taxes and fees, strong powers to enforce revenue collection, flexibility to cut expenses, and discretion to use accumulated reserves. The rating distribution of U.S. tax-supported and essential service municipal enterprise bonds remains among the highest within the Fitch-rated universe.

Tax-Supported and Essential Service Enterprise Ratings vs. Corporate Ratings

(%)

	AAA	AA	A	BBB	BB	B and Below
Tax-Supported and Essential Service Enterprise ^a	6.2	46.5	39.7	6.8	0.4	0.4
U.S. Corporate Finance Ratings ^b	1.7	20.8	30.5	30.0	12.2	4.8

^a Includes GO, COP and lease, special tax, and water/sewer. ^b Includes financial institutions and industrials.

As reflected in its rating transitions, Fitch believes that while municipal credit risk may be elevated from very low levels in 2008, defaults are expected to be isolated occurrences. After reviewing the various municipal sectors (tax supported, water/sewer, public power, nonprofit healthcare, higher education, and transportation) and comparing them to each other, as well as to certain investment-grade corporate credits, Fitch believes that a recalibration of its municipal ratings, albeit with some adjustments from those initially proposed, is still needed to achieve comparability with other credit sectors.

Rating Recalibration by Sector

State and Local Tax-Supported

GO and Dependent Ratings — One to Two Notches Up

Fitch will go forward with its initial plans to revise upward its state and local GO ratings, as well as those ratings linked to the GO, such as COPs, lease revenue bonds, and state credit enhancement programs. Similar to what was initially planned, these ratings will be revised by two notches if the GOs are rated 'BBB-' to 'A' and one notch if the GOs are rated 'A+' to 'AA+'.

Special Tax-Backed Bonds — One Notch Up

Fitch has observed greater than expected pledged revenue volatility for special tax-backed bonds over the last 18 months, even in those secured by broad-based sales taxes in large, diverse economic areas. This has resulted in notable deterioration of debt service coverage in many of these securities. While Fitch still believes that economic characteristics provide important inputs into both GO and special tax bonds, special tax declines affect the latter much more directly and severely given the inability to compensate for poor performance of the pledged revenues. Therefore, they will be adjusted upward by only one notch at all investment-grade rating levels ('AA+' to 'BBB-'), rather than one notch at the higher levels and two notches at the lower levels, as originally planned. Included in this subsector are broad-based taxes such as sales and income taxes, as well as narrow ones such as hotel occupancy taxes, tax allocation bonds, tax increment financings, special assessment bonds, and payments in-lieu-of taxes (PILOTs).

Essential Service Municipal Enterprises

Water/Sewer Bonds — One to Two Notches Up

Fitch has observed relatively minor revenue pressures on essential service municipal enterprise systems. Their essentiality and monopoly status give them an unusually high degree of flexibility to adjust rates and enforce collections. Furthermore, rates are generally low to moderate relative to both income levels and the costs of other municipal services. Therefore, they are being recalibrated in the same manner as GO bonds. Where there is a senior subordinated bond structure that is rated differently, the recalibration of the subordinate lien will follow that of the senior (e.g. a senior subordinated structure rated 'A+' and 'A' will be recalibrated by one notch to 'AA-' and 'A+').

Public Power (Distribution Only) — One to Two Notches Up

Fitch will recalibrate public power systems that distribute but do not generate power (distribution-only systems) in the same manner as water/sewer systems. Since distribution-only systems act as sole providers of an essential service and, for the most part, are self regulated, they also have flexibility to adjust rates when necessary. Systems that have responsibility for managing their own resource needs, either by self-generating power directly or through contractual arrangements with joint action agencies or generation and transmission cooperatives, are currently rated in a comparable manner with investor-owned utilities and other corporate credits; thus, they are not included in the recalibration.

Public Higher Education — Zero to One Notch Up

Fitch believes a one notch recalibration is appropriate for investment-grade public higher education bonds rated 'AA-' to 'BBB-'. Public higher education bonds already rated 'AA' or higher will not be recalibrated, as Fitch believes state support is less meaningful for those institutions given the size and diversity of their resources. Support of varying degrees by state governments to their public colleges and universities affords these institutions a degree of long-term credit stability generally not shared by their largely tuition-driven private institution counterparts. Still, public higher education institutions face operating pressures similar to private universities that cannot be fully offset by their relationship with their home state, and their level of future state funding is uncertain, particularly given the budget stress facing many states and the near-term discontinuation of federal stimulus funding. While public higher education may be sheltered to some degree from competitive forces and unexpected enrollment declines, the insulation from credit risk is not as strong as for water/sewer or public power distribution systems.

Sectors Not Affected

Public power generating systems, nonprofit healthcare, private higher education, tax-exempt housing, airports, ports, toll roads, grant anticipation revenue vehicles (GARVEEs), state revolving funds (SRFs), bond banks, economic development bond funds, and other municipal enterprises are not being recalibrated, as Fitch's review has led to the conclusion that these ratings are already comparable with those of other sectors.

Short-Term Ratings

Fitch's short-term ratings map to a range of long-term ratings (*see table, page 5*). Fitch will maintain the same mapping of its long- and short-term ratings after recalibration; hence, recalibrations of long-term ratings will drive revisions in some short-term ratings, most notably bond anticipation notes (BANs) and variable-rate demand notes (VRDNs). According to Fitch's long- and short-term mapping, certain long-term rating levels may map to two possible short-term ratings; for example, an 'A+' long-term rating may map to either 'F1' or 'F1+'. Where the recalibrated long-term rating maps to one of two short-term rating outcomes, the lower short-term rating will generally be maintained.

In certain cases, Fitch's short-term ratings may diverge from the standard mapping, either up or down, where analytically appropriate.

Long- and Short-Term Rating Correspondence

Long-Term Rating	Short-Term Rating
AAA	F1+
AA+	F1+
AA	F1+
AA-	F1+
A+	F1+ or F1
A	F1
A-	F1 or F2
BBB+	F2
BBB	F2 or F3
BBB-	F2 or F3

Dual-Party Pay Ratings

Ratings on certain dual-party pay structures, which are derived from the higher of the unenhanced long-term rating on the municipal bond and the long-term rating on the letter of credit provider, will be recalibrated if the unenhanced rating on the municipal bond is recalibrated and a higher rating is thereby called for based on Fitch's criteria for dual-party pay ratings.

Moral Obligations

Ratings of certain moral obligation supported credits, which are derived from the rating of the primary security and the moral obligation provider, will be recalibrated if the rating on the primary security or moral obligation provider is recalibrated up and a higher rating is thereby called for based on Fitch's criteria for moral obligations.

Tender Option Bonds

Long-term ratings on tender option bonds (TOBs), which are derived from the long-term rating of the bond within the TOB trust, will be recalibrated if the rating on the municipal bond within the TOB trust is recalibrated and a higher rating is thereby called for based on Fitch's criteria for TOBs.

Additional Details

- Recalibrations of investment-grade ratings will be implemented formulaically, without individual reviews of the affected credits.
- Recalibrations of below-investment-grade rated bonds will be considered on a case-by-case basis, as the variety and fluid nature of the risks affecting below-investment-grade municipal bonds make use of a formulaic revision inappropriate. Some below-investment-grade ratings may not be adjusted at all. Recalibration of below-investment-grade ratings will be implemented on the same date as all other ratings in that sector.
- Rating changes made as a result of the new framework will be referred to as "revision ratings," not "upgrades."
- Any Rating Watches currently in place will be carried over post-recalibration.
- Rating Outlooks will also be carried over post-recalibration, with a few exceptions. For GOs, water/sewer systems, and public power distribution-only systems that are rated 'A' with a Positive Rating Outlook and 'A+' with a Negative Rating Outlook, the ratings will be recalibrated to 'AA-' with a Stable Rating Outlook. For dependent credits rated one notch below their corresponding GO that are rated 'A-' with a Positive Rating Outlook and 'A' with a Negative Rating Outlook, the ratings will be recalibrated to 'A+' with a Stable Rating Outlook. For GOs, special tax bonds, water/sewer systems, and public power distribution-only systems that are rated 'AA+' with a Positive Rating Outlook and 'AAA' with a Negative Rating Outlook, the ratings will be recalibrated to 'AAA' with a Stable Rating Outlook. For dependent credits rated one notch below their corresponding GO that are rated 'AA' with a Positive Rating Outlook and 'AA+' with a Negative Rating Outlook, the

ratings will be recalibrated to 'AA+' with a Stable Rating Outlook. For public higher education credits rated 'AA-' with a Positive Rating Outlook and 'AA' with a Negative Rating Outlook, the recalibrated rating will be 'AA' with a Stable Rating Outlook. These exceptions are so the ordinal rankings of these credits are not reversed as a result of the recalibration.

- Recalibrations for states, as well as the District of Columbia, New York City, and Commonwealth of Puerto Rico, will be implemented on April 5. Recalibrations in all the other affected sectors will be implemented on April 30. Between now and the date that recalibration is implemented, all rating actions will reference both the current rating and what the rating will be after recalibration in accompanying Rating Action Commentaries (RACs) and reports.

Ratings Distribution After Recalibration

The rating distribution of the tax-supported, water/sewer, public power distribution systems, and public higher education sectors will shift upward slightly after they have been recalibrated. There will be a compression of credits in the 'AAA' and 'AA' categories and fewer credits rated in the 'A' and 'BBB' categories.

Tax-Supported and Essential Service Enterprise Ratings: Current vs. Expected Rating Distribution

(%)

	AAA	AA	A	BBB	Below Investment Grade
Current Ratings	6	46	40	7	1
Post Recalibration ^a	15	67	15	2	1

^aEstimated.

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Recalibrated Bonds



Greensboro (NC)

<u>Bond Name</u>	<u>Previous Underlying Long Term Rating</u>	<u>Recalibrated Underlying Long Term Rating</u>
- Greensboro (NC) combined enterprise sys rev bonds ser 2001A	AA+ / RO:Sta	AAA / RO:Sta
- Greensboro (NC) combined enterprise sys rev bonds ser 2003B (liquidity facility: Bank of America, N.A.)	AA+ / RO:Sta	AAA / RO:Sta
- Greensboro (NC) combined enterprise sys rev bonds ser 2005B (liquidity facility: Bank of America, N.A.)	AA+ / RO:Sta	AAA / RO:Sta
- Greensboro (NC) combined enterprise sys rev bonds ser 2007A	AA+ / RO:Sta	AAA / RO:Sta
- Greensboro (NC) combined enterprise sys rev bonds ser 2007B (liquidity facility: Bank of America, N.A.)	AA+ / RO:Sta	AAA / RO:Sta
- Greensboro (NC) combined enterprise sys rev bonds ser 2009A	AA+ / RO:Sta	AAA / RO:Sta
- Greensboro (NC) combined enterprise sys rev bonds ser 2009B (liquidity facility: Bank of America, N.A.)	AA+ / RO:Sta	AAA / RO:Sta
- Greensboro (NC) combined enterprise sys rev rfdg bonds ser 2006	AA+ / RO:Sta	AAA / RO:Sta
- Greensboro (NC) combined enterprise sys rev rfdg bonds ser series 2009C	AA+ / RO:Sta	AAA / RO:Sta

Moody's

INVESTORS SERVICE

RATING METHODOLOGY

Recalibration of Moody's U.S. Municipal Ratings to its Global Rating Scale

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Overview

Beginning in April 2010, Moody's plans to recalibrate its long-term U.S. municipal ratings to its global rating scale. The global rating scale is used to rate sovereign, sub-sovereign, financial institution, project finance, structured finance and corporate obligations. This recalibration will enhance the comparability of ratings across the Moody's-rated universe. Historically, Moody's municipal ratings have been calibrated on a separate rating scale that emphasizes the ordinal ranking of credit risk within the municipal sector only and measures distance to distress. Upon recalibration Moody's will maintain a single global scale rating system for municipal issuers, and we will no longer assign municipal scale ratings to municipal obligations.

Our benchmarking analysis of municipal credits against global scale ratings across the Moody's rated universe will result in an upward shift for most state and local government long-term municipal ratings by up to three notches¹. The degree of movement will be less for some sectors, most notably in the enterprise sectors² which are largely already aligned with ratings on the global scale.

Market participants should not view the recalibration of municipal ratings as rating upgrades, but rather as a recalibration of the ratings to a different rating scale.

This recalibration does not reflect an improvement in credit quality or a change in our credit opinion for rated municipal debt issuers. Instead, the recalibration will align municipal ratings with their global scale equivalent. A key driver for the recalibration is the market's increasing desire for rating comparability between municipal and non-municipal sectors given the growing number of "cross-over" investors active in both tax-exempt and taxable markets.

The following summarizes our conclusions by broad municipal sector:

- » State and local government general obligation (GO) ratings: will change by an average of about two notches higher than their current ratings on the municipal scale, with a range of zero to three notches. Ratings at or above Aa3 on the municipal scale will receive less upward movement than those rated below Aa3.

¹ A notch is defined as a step on Moody's alphanumeric rating scale (e.g., from A2 to A1).

² The enterprise sectors include healthcare, higher education, housing, not-for-profit organizations, public power, transportation, and other infrastructure projects.

- » State and local government sales and special tax obligations: generally will move up by one notch. These obligations are typically secured by broad-based general sales taxes, and narrower restricted-use taxes such as hotel taxes and gas taxes. Special tax pledged revenues are generally more volatile than other broad-based tax revenues and the issuer often has less control in setting the tax rate associated with the pledged revenues. Therefore, debt ratings secured by these revenues will receive less lift in the recalibration than general obligation ratings.
- » Housing, healthcare and other enterprise sectors: most will not change because they are already well-calibrated with the global scale. Those enterprise credits that do change will move up by one notch.

Once Moody's U.S. municipal ratings have been recalibrated, they will represent our credit opinion on the global scale for all rated municipal issues and issuers. Any subsequent changes in credit quality will be reflected through upgrades or downgrades on the global scale.

This report will discuss:

- » the projected timeline and guidelines for the rollout of recalibrated ratings;
- » the general approach that will be employed;
- » the specific approaches and key benchmarking factors for the major sectors of state governments and local governments, as well as enterprises – health care, higher education, housing and infrastructure; and
- » the recalibration approach for ratings of “dependent obligations” including leases, appropriation debt and subordinate debt.

Table 1 provides the primary algorithms that were developed to recalibrate municipal scale ratings to the global scale.

TABLE 1

Primary Algorithms by Sector

Upward Shift in Ratings (# of notches)

MUNICIPAL SCALE RATING	GENERAL OBLIGATION; WATER & SEWER; DISTRIBUTION-ONLY UTILITIES; MUNICIPAL UTILITY DISTRICTS (MUDS)	SPECIAL TAX (NON-GO); MASS TRANSIT; NON-UTILITY ENTERPRISES; TAX INCREMENT FINANCING DISTRICTS (TIFs); GRANT ANTICIPATION REVENUE BONDS (GARVEES)	PUBLIC UNIVERSITIES AND PUBLIC UNIVERSITY FOUNDATIONS	HEALTH CARE; HOUSING; PRIVATE K-12 & CHARTER SCHOOLS; PRIVATE UNIVERSITIES & OTHER NOT-FOR-PROFITS; TRANSPORTATION & OTHER INFRASTRUCTURE ENTERPRISES; POWER GENERATING UTILITIES; STATE REVOLVING FUNDS; BOND BANKS; FEDERAL LEASES
Aaa	0	0	0	0
Aa1	0-1	1	0-1	0
Aa2	1	1	1	0
Aa3	1	1	1	0
A1	2	1	1	0
A2	2	1	1	0
A3	2	1	1	0
Baa1	3	1	1	0
Baa2	3	0	1	0
Baa3	2-3	0	1	0
Ba1	0	0	0	0
Ba2	0	0	0	0
Ba3	0	0	0	0
B1	0	0	0	0
B2	0	0	0	0
B3	0	0	0	0
Caa1	0	0	0	0
Caa2	0	0	0	0
Caa3	0	0	0	0

Recalibration to the Global Scale Will Occur in Stages

Due to the number of municipal ratings (nearly 18,000 issuer and security combinations covering approximately 70,000 ratings), the recalibration will be implemented in stages and is expected to occur over a four week period. A tentative schedule is available on our website at www.moodys.com/gsr, which will be updated as necessary to reflect any changes made to the schedule.

Moody's intends to take the following approach to the assignment of ratings during the period of recalibration from municipal scale ratings to global scale ratings:

- » The recalibration of all ratings within a given sector, other than local governments, will generally take place on the same day. Furthermore, all ratings for a particular obligor typically will be recalibrated on the same day unless they span different sectors, in which case they will be recalibrated with the appropriate sector.
- » Local governments will be recalibrated by state or groups of states.
- » Until a sector or local government within a state has been recalibrated, all existing municipal scale ratings in that sector and all new ratings assigned in that sector will be maintained and monitored on the municipal scale.
- » All new ratings assigned subsequent to the recalibration of a sector or state will be exclusively on the global scale, and municipal scale ratings in that sector or state will no longer be assigned or maintained.
- » When a rating is recalibrated to the global scale, the rating outlook, if any, will be updated to reflect Moody's outlook on the new rating.
- » Ratings that were under review for upgrade or downgrade prior to the recalibration will remain under review after the recalibration.
- » After a sector recalibration, global scale ratings on insured bonds in that sector will generally be based on the highest of the financial guarantor's insurance financial strength rating (IFSR), the published underlying rating, and the enhanced rating (such as an intercept program that allows a state to divert local aid to a trustee for debt service payment), if any.
- » The 27 outstanding global scale ratings for US municipal issuers will be reviewed and changed, if necessary, to be consistent with this methodology when the corresponding municipal scale ratings are recalibrated to the global scale.

U.S. Municipal Default and Transition Rating Experience

The historical incidence of municipal market default and rating transition (i.e., the degree of rating change over a given timing horizon) by rating category has been low when compared with the same history in global corporate markets (see "Moody's U.S. Municipal Bond Defaults and Recoveries, 1970-2009"). Following the recalibration of municipal scale ratings to the global scale, we expect future municipal default and transition rates at each rating level to be more comparable to other global scale ratings. It should be noted, however, that municipal and corporate entities continue to be influenced by different key rating factors, reflecting the respective fundamental strengths and weaknesses, and the inherently different nature of each sector. Many highly-rated municipal issuers, for example, may not share the strong liquidity levels and capital cushion characteristics that are common for similarly rated corporate credits. Instead, high ratings (and low default incidence) in the municipal sector are often derived from broad based revenue raising ability including taxing powers. This, in addition to the generally predictable revenue and expense flows for municipal issuers, forms the basis for strong access to public and private sources of borrowed funds when needed.

Unlike corporate issuers, most municipal issuers have the ability to raise taxes or fees. Enterprise issuers typically cannot levy taxes, but some may benefit from strengths not typical of corporate issuers, such as near-monopoly market positions, partial government funding, tax-exempt status, endowments and private donations. For these reasons, our analysis focuses on the ability and willingness of municipal issuers to adjust revenues and spending to achieve a balanced budget position and fund operations and debt service.

U.S. states and local governments have been the subject of headline news because of tax revenue declines and budget gaps, leading in some cases to significant budget pressures. Many U.S. states are now entering their annual budget cycles and must adjust to revenue declines for the second or third consecutive year. Weak personal income tax and sales tax revenues, coupled with ongoing spending demands have caused significant gaps in many U.S. state budgets in the current 2010 fiscal year, with pressure expected to continue in fiscal 2011. While states will remain under credit pressure for many months, they possess inherent credit strengths that make default highly unlikely, including significant budgetary flexibility and a wide range of policy tools to address budget shortfalls.

Many of these fundamental strengths also exist for lower levels of U.S. municipal government (counties, cities/towns, school districts), although the depth of local government resources, revenue diversity and budgetary flexibility is generally less than for states. In addition, local governments typically have a relatively higher percentage of services that cannot be easily eliminated or downscaled. We anticipate widespread pressure for local governments, with potential for higher credit stress for smaller and weaker municipalities, although defaults are expected to be idiosyncratic and rare.

For many state and local governments, the detailed decisions on closing a budget gap are often a source of intense and lengthy public debate and political deliberations. Historically, U.S. state and local government financial crises have, nonetheless nearly always been averted without a bond default. While we expect that municipal defaults will continue to be very rare, we also believe it is possible that there could be an increase in defaults in the future. Defaults may occur when the political process breaks down, or where a crisis that we expected to be averted, is not. It may not always be possible to predict in advance which entities will fail to avert a crisis, leaving the potential that a small number of ratings could move down quickly and in multi-notch increments. Nonetheless, we expect that the aggregate default experience for municipal credits will remain low.

Recalibration Guided By Fundamental Analysis & Benchmarking

Moody's global scale ratings provide ordinal rankings of credit, both within and across sectors, industries, asset classes, and geographies as well as a measure of the distance to distress. We intend our global scale ratings to be predictive of both *relative and absolute* credit risk. Global scale ratings are also intended to indicate average levels of default and loss that are roughly consistent across sectors and geographies. However, for any given rating level, the actual default and loss experience for different sectors will not be identical for each time horizon or historical period, as market and macroeconomic factors play out differently across sectors and regions. For example, single-A rated sovereign debt and corporate debt may not experience the same rate of default or loss severity during periods of broad economic expansion or recession, or during a sector or geographic-specific downturn. They are, however, intended to have similar average loss rates over long periods of time.

Our recalibration of municipal sectors to the global scale involves a three-step process as outlined below.

Step One: Benchmarking Representative Ratings Against Other Ratings on the Global Scale

To position Moody's municipal ratings on the global scale, we benchmarked the credit risk associated with representative municipal credits in each sector against other non-municipal credits in all sectors including corporates, financial institutions, sovereigns, and regional governments outside the U.S. This benchmarking exercise involved detailed credit discussions among a group of credit policy professionals and senior-level analysts from every major business line so that Moody's municipal ratings post-recalibration would be comparable to other global scale ratings. Through these discussions, we calibrated a group of representative municipal credit ratings in each sector to various non-municipal credits that are currently rated on the global scale. The benchmarking of these representative credits on the global scale then served as a point of reference for recalibrating other municipal ratings within that sector. During these benchmarking exercises, we considered a number of key credit factors including:³

- » intrinsic financial strength;
- » historical default and loss experience of similar credits;
- » future potential for default and loss;
- » potential sources of external support in the event of financial distress (including support from a senior level of government, a sponsoring government of a public enterprise, or other sources);
- » vulnerability to event risk and other factors that could lead to a rapid multi-notch rating change; and
- » governance framework.

³ While some or all of these credit factors may have been incorporated into Moody's municipal scale ratings in the past, certain factors are likely to receive greater emphasis going forward as we shift our focus from rank-ordering credit risk within the municipal sector, to evaluating default and loss characteristics relative to similarly-rated credits in other global sectors.

Step Two: Developing Sector-Specific Approaches to Recalibration

We used the results of these benchmarking exercises to develop an approach for recalibrating the municipal scale ratings for a given sector to comparable ratings on the global scale. In the state and local government sectors, we determined that algorithms could be developed to recalibrate classes of ratings by security pledge because, at each rating level, our municipal scale ratings are rank-ordered as to relative credit risk. In certain sectors, we found that select rating levels on the municipal scale recalibrated to one of two possible global scale rating outcomes. In those cases we conducted individual reviews to determine the appropriate outcome.

Step Three: Assigning Global Scale Ratings

The final step of assigning and publishing global scale ratings to Moody's-rated municipalities in the U.S. will occur during the recalibration period beginning in mid-April 2010. We will apply the recalibration approach for a given sector to the individual credits within that sector to determine the appropriate placement of individual municipal scale ratings on the global scale. Rating committees will approve the proper application of sector-specific algorithms. In situations where the standard algorithms do not apply, municipal scale ratings will be reviewed individually to determine where they fall on the global scale.

Notching Conventions for Dependent Obligations to be Revised Slightly

As part of the recalibration process, we have reviewed our notching conventions to determine whether they appropriately position an issuer's related ratings on the global scale relative to its primary rating. The results of this review led to a slight change in our notching conventions as described below.

Moody's characterizes municipal obligations as either primary or related. For state and local governments, the primary debt usually carries a general obligation pledge; in other sectors it generally has the most senior revenue pledge. Moody's assigns ratings to many kinds of municipal obligations that are analytically similar to the primary obligation ("related ratings") by notching downward from the primary rating. Notching conventions generally govern the number of notches between the primary rating and particular types of related ratings.⁴ We typically apply notching conventions to related obligations such as appropriation-backed debt, lease debt, moral obligations, and state aid intercept programs. The amount of notching applied reflects a variety of factors, such as the risk of non-appropriation or abatement of payments needed to support debt service. In contrast, ratings that rely on different credit factors than the GO, including special purpose special tax credits such as dedicated sales or hotel tax bonds, and revenue bond credits such as water and sewer enterprises, are not assigned through notching conventions and are evaluated according to the credit factors germane to those credit pledges.

While our current notching conventions will be largely maintained after ratings are recalibrated to the global scale, the number of notches between a primary and related rating will be limited to no more than three notches post recalibration. This compression of our notching conventions reflects the overall compression of municipal scale ratings to the global scale and is consistent with rating practices across non-municipal sectors globally. During the recalibration process, Moody's will first recalibrate the rating of each issuer's "primary" debt to the global scale, and then place "related" obligations on the global scale according to the following guidelines:

⁴ The application of notching conventions is not automatic and is subject to rating committee review of the relevant factors for each rating assignment.

MUNICIPAL SCALE NOTCHING (PRIMARY VS. RELATED RATING)	GLOBAL SCALE NOTCHING (PRIMARY VS. RELATING RATING)
1 notch	1 notch
2 notches	2 notches
3 notches	3 notches
4 or more notches	3 notches

Some Municipal Ratings May Not Change

Certain municipal ratings will not change as a result of the recalibration, because their risk parameters are already aligned with the global scale. These include ratings on housing, not-for-profit healthcare, private higher education, public power, toll road, state revolving fund, bond bank, charter school and land-secured issuers and issues, as well as federal leases and tax-exempt bonds backed by corporate credit.

We also determined that certain municipal ratings that are currently in the Aa1 category are already aligned with the global scale and will not move higher during the recalibration. Moody's highest rating category of Aaa is intended to denote extremely low credit risk, as determined through a combination of quantitative and qualitative factors. As a result, GO bonds of state or local governments rated Aa1 with a negative outlook will remain at Aa1 and will have a stable outlook after the recalibration.

Pre-refunded bonds that are rated based on an assessment of the quality and sufficiency of securities (typically US government securities) held in an escrow, and transactions insured by a financial guarantor that do not have a municipal underlying or enhanced rating, are already on the global scale and will be clearly identified as global scale ratings upon the initiation of the recalibration activities.

Short-Term Ratings. Moody's has previously determined that our short-term municipal ratings are already aligned with short-term ratings in other global sectors. We have reviewed our methodology for determining long-term rating thresholds associated with our short-term ratings. We have, where appropriate, adjusted the *minimum* long-term rating thresholds required to achieve various short-term rating levels (presented in the following table). As stated in the methodologies for rating various short-term debt instruments, the issuer's long-term rating in and of itself does not determine the short-term rating assigned to a given short-term instrument, but it is an important input to the short-term rating outcome.

The majority of bond anticipation notes ("BANs") and cash flow notes are issued by state and local governments as general obligations, and therefore, the adjustments to the long-term thresholds reflect the algorithms we expect to use when recalibrating general obligation ratings. The minimum long-term thresholds for ratings assigned to variable rate demand bonds ("VRDBs") remain unchanged, and are consistent with our rating methodology for VRDBs published in January 2010. Our minimum threshold is Baa1 for VMIG 3-rated VRDBs because the rating transition for VRDBs backed by a standby bond purchase agreement allows for additional distance to downgrade to below investment grade due to the presence of automatic termination events in the standby bond purchase agreements that provide liquidity for the bonds. In contrast, we will consider assignment of MIG 3 ratings to BANs and cash flow notes that have long-term global scale ratings ranging from Baa1 to Baa3.

U.S. Municipal Short-Term Rating Minimum Thresholds

LONG-TERM RATING - MUNICIPAL SCALE	LONG-TERM RATING - GLOBAL SCALE	SHORT TERM RATING - VARIABLE RATE DEMAND BONDS	SHORT TERM RATING - BOND ANTICIPATION NOTES, CASH FLOW NOTES	SHORT TERM RATING - COMMERCIAL PAPER
A3	A2	VMIG 1	MIG 1	P 1
Baa1 - Baa2	A3	VMIG 2	MIG 2	P 2
Baa3	Baa1*	VMIG 3*	MIG 3*	P 3
Ba1	Ba1	SG*	SG	NP

* For SBPA-backed VRDBs, the rating transitions are higher to allow for distance to downgrade to below investment grade due to the presence of automatic termination events in the SBPAs.

Sector-Specific Factors Relevant to Recalibration Methodology

The following section discusses the factors that Moody's considered in determining the methodologies for recalibrating the four major sectors of municipal debt to the global scale.

I. State Governments**Sector Attributes**

U.S. states are inherently strong credits due to their size, diversity, and relative flexibility to raise revenues and reduce expenditures. States are going concerns, cannot file for bankruptcy, and have sovereign immunity so that they cannot be sued without their consent. States provide essential services not provided by the federal government (schools, policing, welfare, etc.), although they delegate some of these responsibilities to lower levels of government. Their primary revenue sources are sales and income taxes, and they have broad ability to raise taxes or cut spending to achieve fiscal balance.

Management practices are generally strong. Annual or bi-annual budgets are adopted with a goal of balancing revenues and expenditures, and all states provide annual financial reporting. Debt burdens are typically moderate and many state governments have developed debt affordability plans to guide them in managing debt issuance while addressing capital needs.

States benefit from the federal government's role in assuming the costs associated with natural and manmade disasters such as earthquakes or terrorist attacks. However, states do not, and are not expected to, benefit from direct federal support for state debt obligations in the event of fiscal stress or mismanagement.

Benchmarking and Recalibration Considerations

Benchmarking outcomes indicate that state general obligation ratings, which currently range from Aaa to Baa1, are consistent with global scale ratings ranging between Aaa and A1.

States have significant credit strength relative to corporate issuers, such as their ability to levy taxes, inability to file for bankruptcy, and lack of default history. Corporate credits may, however, have more transparent and frequent financial disclosure. States have many similarities with sovereign governments, with the obvious difference that they do not have their own currency and therefore do not control monetary policy and cannot print money to pay obligations. Like U.S. local governments, states enjoy the strength of the U.S. institutional framework and governance such as respect of

property rights, transparency, relative efficiency and predictability of government action, and a degree of consensus regarding the key goals of political action. Relative to other sub-sovereign entities, the institutional strength of states is generally conducive to the strong respect of contracts and, therefore, the rights of bondholders.

The strongest state credit is its general obligation debt, which benefits from the pledge of a state's full faith and credit. The strength of the GO pledge, however, differs from one state to another based on the state constitution and legal framework for debt issuance. The general obligation pledge of a state government may be stronger than the legal pledge typically offered by non-U.S. sub-sovereigns, but U.S. states do not enjoy the same degree of expected federal support from the national government.

Ratings for other state securities are often related to the state's general obligation pledge, including lease and general fund obligations, moral obligations, and state aid intercept programs. For these related ratings, notching distinctions described above will apply. Other state government securities, such as special tax bonds, have been benchmarked relative to the GO ratings for appropriate placement on the global scale. However, these will not be directly notched off of the GO rating.

II. Local Governments

Sector Attributes

The local government sector includes by far the largest group of ratings to be recalibrated to the global scale, encompassing approximately 14,000 different issuer and security pledges. Local governments are sometimes referred to as "creatures of the state" because they are established by, and operate under, the state constitutions and legal frameworks set by the states. State laws define the range of services that local governments provide and grant local governments the power to levy taxes.

Local governments range from very large municipalities such as New York City, with over eight million residents, to tiny hamlets with fewer than one thousand residents. Some are general purpose governments, while others are special purpose districts that serve a limited function such as school, park or library districts. Differing forms of local government, such as a county, city, school district, and special purpose district, may cover overlapping geographic areas. Certain revenue-generating functions, such as provision of water and sewer services, may be carried out directly by a municipality or delegated to a special purpose public authority.

Benchmarking and Recalibration Considerations

Local governments have sufficient similarities which allow them to be grouped together for the purpose of assessing credit quality despite differences in the political, legislative and service providing frameworks. Because of these similarities, our rating recalibration of local government GO and dependent ratings will utilize a common algorithm as outlined in Table 1. Local governments represent the largest group of municipal issuers and the financial strength differences among these issuers are already reflected in their current ratings on the municipal scale. Therefore, the application of a recalibration algorithm will result in appropriate placement of local government ratings on the global scale.

We plan to recalibrate local government ratings that are not dependent on the rating level or rating movement of the parent GO, such as water and sewer bonds and other credits, through a similar approach to the GO credits. The recalibration to the global scale of each credit type will be governed

by its own algorithm establishing comparability with global scale ratings, including the associated recalibrated GO ratings.

Special Tax Obligations and Niche Obligations

Special tax obligations rated Baa1 and higher on the municipal scale will move up by one notch. These obligations are typically secured by taxes other than property taxes, including both broad-based general sales taxes and more narrow restricted-use taxes. Special tax pledged revenues are generally passive in nature – there is often no obligation of the municipal obligor to adjust the tax rate – even if dedicated revenues are not sufficient to cover debt service. Furthermore, local governments are not likely to have unfettered control over setting the rate of tax or defining the types of transactions that are subject to taxation. Therefore, debt ratings secured by these revenues will receive less lift in the recalibration than general obligation ratings.

There are two main types of special tax pledged revenues: (1) GO-related, broad-based general sales and excise taxes, and (2) Non-GO-related, narrower, restricted-use taxes such as hotel / motel and gas taxes. GO-related special tax bonds produce excess revenues that support operations after debt service. As a result, these bonds are notched-down from the parent government rating. Special tax bonds that are not GO-related are rated primarily on debt service coverage and additional bonds tests because pledged revenues are usually dedicated to capital projects and will likely be leveraged to allowable limits. While there may be some relationship between the credit for these bonds and the credit of the parent government due to a common economic climate, the relationship is not direct and, therefore, ratings could be higher or lower than the rating of the parent government.

Special tax obligations are secured by revenues that are generally economically-sensitive. Revenues pledged to special tax obligations are often not controllable like other taxes, and issuers do not have the ability to make periodic adjustments to the rate of tax to produce a desired amount of revenues to support debt service. Pledged revenues may include sales taxes, gas taxes, hotel taxes, real property transfer taxes and court fines and fees, among others. Special tax revenues are often subject to policy changes on rate and tax base. Special tax bonds do not contain typical GO strengths, and most notably, lack an unconditional promise to pay. The credit quality and ratings of these bonds become progressively weaker as additional bonds tests and debt service coverage levels decline. Special tax bonds that are rated Baa2 and below on the municipal scale will, therefore, receive no ratings lift in the recalibration, as these bonds carry relatively greater risk that revenues may deteriorate to near or below the sum-sufficient levels needed to pay debt service.

Finally, there are other types of local government debt, such as land secured financings, charter schools, bond banks, and specialized government enterprises like parking facilities and golf courses. We have employed a similar approach of benchmarking these ratings relative to other credits and have determined that the ratings in these niche sectors will not change because these municipal ratings are already aligned with credits that have similar attributes on the global scale.

III. Enterprise Sectors: Health Care, Higher Education, Not-For-Profits & Infrastructure (Transportation and Power)

Sector Attributes

Credits in these enterprise sectors all derive their revenues from user fees and charges, rather than tax revenues. They range from those that have strong public governance and are closely related to state and local government, such as a public university; to those that are privately governed and operated, albeit with a non-profit mission, such as most hospitals. Some enterprises, including electric distribution systems, have near-monopolistic powers, whereas others operate in highly competitive markets.

The existing municipal scale ratings in the enterprise sectors have emphasized fundamental credit factors, such as governance/management, market position, financial position and leverage/capital structure. Some enterprise issuers play a critical role in providing essential public services and a sponsoring government may be likely to support such an enterprise issuer in financial crisis. There may be clear mechanisms through which such support can be provided. Such governmental support is much more likely to be forthcoming for public sector entities than for private not-for-profit corporations. The latter group, not-for-profits, may occasionally be supported by governments when in stress, but are more likely to receive no extraordinary support at all, or partial support from private philanthropic donors.

Benchmarking and Recalibration Considerations

Many enterprise sectors have counterparts in other markets that are already rated on the global scale. These include for-profit healthcare and education companies, power utilities, infrastructure companies and project financings, as well as public sector universities and hospitals located outside the US. Our rating recalibration for enterprise issuers benchmarked the ratings for these issuers against their non-municipal counterparts. While these comparisons can be challenging due to differences in governance structures, profit motives, geography, and regulatory frameworks, they are important in the effort to align enterprise ratings on the global scale.

Global scale ratings for enterprise credits also give credit to the potential for such unusual or extraordinary support from a sponsoring government or other third party. We focused on factors that might improve the credit position of the issuer during periods of financial stress, as well as after a default. Specifically, we assessed the factors that might:

- » Slow the downward transition of the rating
- » Reduce probability of default, or
- » Reduce loss given a default.

Ratings for enterprise issuers that are publicly governed entities and that receive significant public funding, such as public universities and community colleges, will be recalibrated up by one notch to reflect the comparative credit strengths of these issuers. This results from benchmarking these credits against non-municipal ratings already on the global scale, as well as municipal state and local government ratings that will be recalibrated at a higher rating level.

Enterprises with notable independent strengths, such as unusually strong financial and market positions, benefit already from relatively high municipal ratings and thus these ratings are unlikely to change when recalibrated on the global scale.

Private, 501c3, not-for-profit organizations (such as hospitals, private universities, private K-12 schools, museums, and foundations) are a special group of enterprises that generally cannot expect extraordinary support from government during financial stress due to their private standing. Ratings in this group will not change when recalibrated to the global scale.

U.S. infrastructure sector project financings such as stand-alone toll road, stadium and hotel financings are already aligned with the global scale because they are unlikely to receive extraordinary governmental support, and share many of the same attributes and risks that are present in comparable corporate and global infrastructure sectors.

IV. Housing and State Revolving Funds

Sector Attributes – Housing

The housing sector includes two broad sub sectors, state housing finance agencies (HFAs) and housing project financings. State HFAs are state-chartered entities that were established to help meet the affordable housing needs of the state. Most HFAs operate independently from the state under a board appointed by the state's governor. HFAs issue debt to finance single and multi-family housing, often under open indentures that combine loans of many vintages. State HFA debt is generally rated in the A1 to Aaa range. The ratings are based on the historical performance of the assets and programs, management performance, and issuer support and its relationship to the state.

State HFA programs are subject to many of the same risks as comparable corporate, financial institution and structured credits including volatility in home prices and increased foreclosures. In addition, the ratings of these programs are vulnerable to rating changes of third parties, such as mortgage insurers, investment providers and swap counterparties, all of whom are rated on the global scale. Finally, many of the HFA programs were structured to maintain their current rating levels by incorporating various rating triggers and tests into the legal structure. These elements can cap the rating on a credit with strong current financial performance and management because of the potential for dilution of the credit back to the original rating level.

Housing project financings include military, student, affordable and subsidized housing as well as low income housing tax credit funds. These credits are also subject to real estate risks that are present in comparable corporate, financial institution and structured financings. These risks include volatility in occupancy, rent levels and expenses. While the projects may get support from their owners or other interested parties such as a university or the Armed Services, this level of support is already incorporated into the current ratings of the financings. The support often mitigates the higher leverage and lower debt service coverage levels that these assets exhibit versus comparable assets on the corporate side.

Sector Attributes – State Revolving Funds

State revolving funds (SRFs) are state-level pooled financings which make loans to local municipalities for certain eligible water pollution control and drinking water projects. Clean Water SRFs were established by the 1987 Clean Water Act amendments, and Drinking Water SRFs were added with

the Safe Drinking Water Act of 1997. SRF debt is generally rated Aaa, with a few programs in the Aa range, due to subordination or less robust levels of over-collateralization. The ratings are based on the historical performance of the credits in the sector, the program-level financials, management performance, and the essentiality of purpose of wastewater and drinking water projects.

Similar to credits in the housing sector, SRFs are exposed to many of the same risks as corporate and structured credits. These risks include counterparty risk, as SRFs typically have a significant amount of the equity necessary to maintain programmatic strength in investments held by third party providers. Furthermore, while SRF assets consist of loans to lower rated borrowers, they are able to achieve their ratings in large part by maintaining significant over-collateralization or reserves.

Benchmarking and Recalibration Considerations for Housing and SRFs

The review of the housing sector consisted of a benchmarking of the assets and structures of housing bonds with comparable assets and securities in other real estate or mortgage backed sectors rated by Moody's. We have determined that Moody's municipal housing sector ratings already are aligned with Moody's global scale ratings for real-estate or mortgage backed securities. In addition, housing transactions that are rated based on credit enhancement or mortgage insurance from the U.S. government or government-sponsored enterprise programs already are rated on the global scale.

The review of the SRF sector consisted of a benchmarking of the assets and structures of SRF bonds with comparable assets and securities in other structured sectors rated by Moody's, which are reliant on streams of loan repayments to make debt service. We have determined that state revolving fund ratings are consistent with Moody's ratings assigned on the global scale to similar pooled transactions.

Pursuant to the benchmarking of the housing and SRF sectors, ratings in these sectors will not change as a result of the recalibration to the global scale.

Moody's Related Research

Special Comments:

- » Request for Comment: Assignment of Global Ratings to Tax-Exempt Municipal Obligations, 3/20/08 (108116)
- » Frequently Asked Questions about the Recalibration of U.S. Municipal Ratings to the Global Rating Scale, March 2010 (123744)
- » Moody's U.S. Municipal Bond Defaults and Recoveries, 1970-2009, January 2010 (122579)

Announcements:

- » Moody's Extends Comment Period on U.S. Public Finance Rating Scale, 6/12/08
- » Moody's to Recalibrate its US Municipal Bond Ratings to the Company's Global Rating Scale, 9/2/08
- » Moody's to Recalibrate U.S. Municipal Ratings to Global Rating Scale, 2/13/2009
- » Moody's Recalibrates its Existing Global Scale Ratings Assigned to U.S. Public Finance Issues, 3/18/2009
- » Moody's U.S. Municipal Ratings to Move to Global Scale Beginning April, 3/16/2010

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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Greensboro (City of) NC Water & Sewer Ent.

Moody's Org ID: 809565782 6 Dgt CUSIP: 395468

Senior-most Revenue Backed Rating: Aa1 (GSR)

Outlook: No Outlook

Market Segment: U.S. Public Finance

Sector: WATER/SEWER

State: North Carolina

County: Guilford County, NC

Research Ratings Related Organizations

View MFRA Data

Sale Data

Export Results: 15

Sale Description	GSR	Sale Date	Sale Amount (\$US Mil)	Rating	Underlying Watch Status	Rating	Enhanced Watch Status	Rating	Insured Watch Status
Combined Enterprise System Revenue Bonds Series, 2009B	Yes	18 Mar 2009	4.53	Aa1	Not on Watch	VMIG 1	Not on Watch		
Combined Enterprise System Revenue Refunding Bonds, Series 2009C	Yes	17 Mar 2009	4.54	Aa1	Not on Watch				
Combined Enterprise System Revenue Bonds Series, 2009A	Yes	25 Feb 2009	43.18	Aa1	Not on Watch				
Combined Enterprise System Revenue Bonds, Series 2007B	Yes	29 Jun 2007	10.00	Aa1/VMIG 1	Not on Watch				
Combines Enterprise System Revenue Bonds, Series 2007A	Yes	14 Jun 2007	38.04	Aa1	Not on Watch				
Combined Enterprise System Revenue Refunding Bonds	Yes	16 Nov 2006	49.48	Aa1	Not on Watch				
Variable Rate Combined Enterprise System Revenue Bonds, Series 2005B	Yes	10 May 2005	41.07	Aa1	Not on Watch	VMIG 1	Not on Watch		
Combined Enterprise System Revenue Bonds, Series 2005A	Yes	10 May 2005	30.86	Aa1	Not on Watch				
Variable Rate Combined Enterprise System Revenue Bonds, Series 2003B	Yes	15 Jul 2003	10.00	Aa1	Not on Watch	VMIG 1	Not on Watch		
Combined Enterprise System Revenue Bonds, Series 2003A	Yes	01 Jul 2003	36.31	Aa1	Not on Watch				
Combined Enterprise System Variable Rate Revenue Bonds, Series 2001B	Yes	30 May 2001	20.19	Aa1	Not on Watch	VMIG 1	Not on Watch		
Combined Enterprise System Revenue Bonds, Series 2001A	Yes	09 May 2001	35.74	Aa1	Not on Watch				
Combined Enterprise Revenue Variable Rate Series '98B	Yes	08 Jun 1998	10.00	Aa1	Not on Watch	VMIG 1	Not on Watch		
Combined enterprise Revenue	Yes	15 May 1998	30.00	Aa1	Not on Watch				
Combined enterprise Revenue, Series 1995A	Yes	06 Jun 1995	40.00	Aa1	Not on Watch				

Sale-level Detail: Combined Enterprise System Revenue Bonds Series, 2009B (GSR)

Export

Sale ID: 821543106
Security: Revenue
Primary Purpose: WATER AND SEWER ENTERPRISE
Support: Yes
Sale Type: PFB DVR

Issuer: Greensboro (City of) NC Water & Sewer Ent.
Obligor: Greensboro (City of) NC Water & Sewer Ent.

Sale-Level History Rating Detail

Rating date	Rating	Rating Type	Action
01 May 2010	Aa1	Underlying	Change in Scale
17 Mar 2009	Aa2	Underlying	NEW
17 Mar 2009	VMIG 1	Enhanced	NEW

Maturity Detail

Underlying

Enhanced

Insured

CUSIP	Maturity Date	Rating	Rating Date	Rating	Rating Date	Rating	Rating Date	Enhancement/Insurance Provider
395468FW6	01 Jun 2034	Aa1	01 May 2010	VMIG 1	17 Mar 2009			